

What is claimed is:

1. A flat lamp, comprising:

a bottom having a channel uniformly crossing an entire surface thereof;

an arc-discharging gas within the channel;

a cover disposed upon an upper junction surface of the bottom, the cover coated with a fluorescent material; and

an electric field generating means for generating an electric field, wherein the electric field generating means is placed along opposing lateral sides of the channel.

2. The flat lamp according to Claim 1, wherein the electric field generating means comprises a cathode disposed at a first one of the opposing lateral sides of the channel, an anode disposed at a second one of the opposing lateral sides of the channel, and a connector connected to end portions of the electric field generating means.

3. The flat lamp according to Claim 2, wherein a first distance between the cathode and the anode is approximately the same as a second distance between the opposing lateral sides of the channel.

4. The flat lamp according to Claim 2, wherein the connector applies an external power source to the electric field generating means.
5. The flat lamp according to Claim 1, wherein the channel is a continuous curve having a first open surface that is sealed after an end portion of the electric field generating means has been connected to a connector and after the arc-discharging gas has been injected into the channel.
6. The flat lamp according to Claim 1, wherein the bottom and the cover are rectangular shaped.
7. The flat lamp according to Claim 1, wherein the channel is alternately formed parallel to a long side and a short side of the bottom.
8. The flat lamp according to Claim 1, wherein the bottom and the cover are round shaped.
9. The flat lamp according to Claim 8, wherein the channel has a volute shape elongated from an open surface along a circumferential surface of the bottom toward a center of the bottom.

10. The flat lamp according to Claim 1, wherein the electric field generating means includes wires.

11. The flat lamp according to Claim 10, wherein grooves of a predetermined depth are formed at both of the opposing lateral sides of the channel.

12. The flat lamp according to Claim 1, wherein the electric field generating means includes at least two films, wherein each of the at least two films is formed upon the opposing lateral sides of the channel.

13. The flat lamp according to Claim 1, wherein the cover is one formed of at least a glass material, a heat-resistant resin, a metal and an oxide.

14. The flat lamp according to Claim 1, wherein a first distance between the cathode and the anode is constant.

15. A liquid crystal display device, comprising:

a LCD panel;

a backlight assembly disposed adjacent to the LCD panel, wherein the backlight unit comprises:

a bottom having a channel uniformly crossing an entire surface thereof;

an arc-discharging gas injected into the channel;

a cover disposed on an upper junction surface of the bottom; and
an electric field generating means for generating an electric field,
wherein the electric field generating means is disposed along opposing lateral
sides of the channel.

16. The liquid crystal display device according to Claim 15, wherein the LCD
panel comprises a lower glass substrate on which at least one thin film
transistor is formed, an upper glass substrate on which at least one color filter
is formed, and a liquid crystal material injected between the lower glass
substrate and the upper glass substrate.

17. The liquid crystal display device according to Claim 15, wherein the
electric field generating means comprises a cathode disposed at one of the
opposing lateral sides of the channel, an anode disposed at another of the
opposing lateral sides of the channel, and a connector connected to an end
portion of the electric field generating means, wherein the connector applies
an external power source to the electric field generating means.

18. The liquid crystal display device according to Claim 15, wherein the
cover is coated with a fluorescent material.

19. The liquid crystal display device according to Claim 15, wherein the

channel is of a serpentine shape.

20. The liquid crystal display device according to Claim 15, wherein the channel is of a volute shape.

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